

Society of Actuaries

RP-2014 Mortality Tables Report

Excerpted and Annotated

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these mortality assumption sets to RP-2014 base rates (Total Employee rates through age 61 and Total Healthy Annuitant rate at ages 62 and above) projected with Scale MP-2014.

		Monthly Deferred-to-62 Annuity Due Values Generational @ 2014					Percentage Change of Moving to RP-2014 (with MP-2014) from:			
Base Rates Proj. Scale	Age	UP-94 AA	RP-2000 AA	RP-2000 BB	RP-2000 MP-2014	RP-2014 MP-2014	UP-94 AA	RP-2000 AA	RP-2000 BB	RP-2000 MP-2014
Males	25	1.3944	1.4029	1.4135	1.4324	1.4379	3.1%	2.5%	1.7%	0.4%
	35	2.4577	2.4688	2.4881	2.5259	2.5363	3.2%	2.7%	1.9%	0.4%
	45	4.3316	4.3569	4.3963	4.4662	4.4770	3.4%	2.8%	1.8%	0.2%
	55	7.6981	7.7400	7.8408	7.9735	7.9755	3.6%	3.0%	1.7%	0.0%
	65	11.0033	10.9891	11.2209	11.5053	11.4735	4.3%	4.4%	2.3%	-0.3%
	75	8.0551	7.8708	8.2088	8.5842	8.6994	8.0%	10.5%	6.0%	1.3%
Females	25	1.4336	1.4060	1.4816	1.5097	1.5195	6.0%	8.1%	2.6%	0.6%
	35	2.5465	2.4931	2.6145	2.6666	2.6853	5.5%	7.7%	2.7%	0.7%
	45	4.5337	4.4340	4.6264	4.7198	4.7497	4.8%	7.1%	2.7%	0.6%
	55	8.1245	7.9541	8.2532	8.4373	8.4544	4.1%	6.3%	2.4%	0.2%
	65	11.7294	11.4644	11.8344	12.1437	12.0932	3.1%	5.5%	2.2%	-0.4%
	75	8.9849	8.6971	9.0649	9.4045	9.3996	4.6%	8.1%	3.7%	-0.1%
	85	5.7375	5.5923	5.9525	6.2910	6.1785	7.7%	10.5%	3.8%	-1.8%

at 6%
Interest

Table 12.2

↑
Most common comparator

Corresponding annuity comparisons at interest rates of 0 percent, 4 percent, and 8 percent are included in Appendix D.

Table 12.3 presents a comparison of 2014 deferred-to-age-62 monthly annuity due values calculated using the collar- and quartile-based RP-2014 base rates to those developed using the “Total RP-2014” basis described above (all calculated at an annual interest rate of 6.0 percent).

		Monthly Deferred-to-62 Annuity Due Values; Generational @ 2014 with MP-2014 Projection Scale					Percentage Change of Moving from Total Base Rates to Collar or Amount Adjusted Base Rates			
Base Rates	Age	Total	Blue Collar	White Collar	Bottom Quartile	Top Quartile	Blue Collar	White Collar	Bottom Quartile	Top Quartile
Males	25	1.4379	1.3920	1.4999	1.3781	1.5179	-3.2%	4.3%	-4.2%	5.6%
	35	2.5363	2.4521	2.6521	2.4258	2.6841	-3.3%	4.6%	-4.4%	5.8%
	45	4.4770	4.3241	4.6908	4.2745	4.7465	-3.4%	4.8%	-4.5%	6.0%
	55	7.9755	7.7184	8.3497	7.6275	8.4307	-3.2%	4.7%	-4.4%	5.7%
	65	11.4735	11.1272	11.9685	11.0495	12.0948	-3.0%	4.3%	-3.7%	5.4%
	75	8.6994	8.3301	9.1162	8.3030	9.3704	-4.2%	4.8%	-4.6%	7.7%
Females	25	1.5195	1.5008	1.5511	1.4918	1.5548	-1.2%	2.1%	-1.8%	2.3%
	35	2.6853	2.6501	2.7450	2.6342	2.7501	-1.3%	2.2%	-1.9%	2.4%
	45	4.7497	4.6848	4.8613	4.6592	4.8659	-1.4%	2.3%	-1.9%	2.4%
	55	8.4544	8.3409	8.6549	8.3179	8.6411	-1.3%	2.4%	-1.6%	2.2%
	65	12.0932	11.9234	12.3959	11.9490	12.3490	-1.4%	2.5%	-1.2%	2.1%
	75	9.3996	9.1986	9.6987	9.2072	9.7841	-2.1%	3.2%	-2.0%	4.1%
	85	6.1785	6.0473	6.3727	6.1073	6.5775	-2.1%	3.1%	-1.2%	6.5%

Table 12.3

↑
Commonly used for unionized and
hourly populations

Appendix D. Additional Annuity Comparisons

The following tables are in the same format as Table 12.2, but based on 2014 annuity values developed at interest rates of 0 percent, 4 percent, and 8 percent.

Interest rate = 0.0 percent:

		Monthly Deferred-to-62 Annuity Due Values; Generational @ 2014					Percentage Change of Moving to RP- 2014 (with MP-2014) from:			
Base Rates		UP-94	RP-2000	RP-2000	RP-2000	RP-2014	UP-94	RP-2000	RP-2000	RP-2000
Proj. Scale		AA	AA	BB	MP-2014	MP-2014	AA	AA	BB	MP-2014
	Age									
Males	25	24.1101	24.0151	25.6070	26.1403	26.3616	9.3%	9.8%	2.9%	0.8%
	35	23.4524	23.3271	24.7181	25.3203	25.5453	8.9%	9.5%	3.3%	0.9%
	45	22.7925	22.7045	23.9194	24.5843	24.7624	8.6%	9.1%	3.5%	0.7%
	55	22.3153	22.2262	23.3319	24.0953	24.2169	8.5%	9.0%	3.8%	0.5%
	65	19.8369	19.6025	20.6171	21.5665	21.6354	9.1%	10.4%	4.9%	0.3%
	75	12.0767	11.6333	12.4554	13.3079	13.6055	12.7%	17.0%	9.2%	2.2%
	85	6.3948	5.8958	6.4251	6.9321	7.2250	13.0%	22.5%	12.4%	4.2%
Females	25	25.4466	24.6984	27.8604	29.1471	28.9955	13.9%	17.4%	4.1%	-0.5%
	35	25.0597	24.2615	27.0324	28.2846	28.1799	12.5%	16.2%	4.2%	-0.4%
	45	24.7292	23.8978	26.2755	27.4918	27.4011	10.8%	14.7%	4.3%	-0.3%
	55	24.5560	23.7370	25.7238	26.9773	26.8015	9.1%	12.9%	4.2%	-0.7%
	65	22.1717	21.3985	22.8712	24.0931	23.8069	7.4%	11.3%	4.1%	-1.2%
	75	14.1053	13.5570	14.5275	15.4743	15.3061	8.5%	12.9%	5.4%	-1.1%
	85	7.6059	7.4367	8.0639	8.7413	8.4324	10.9%	13.4%	4.6%	-3.5%

Table D-1

↑
Future expected lifetime (in years)

Interest rate = 4.0 percent:

		Monthly Deferred-to-62 Annuity Due Values; Generational @ 2014					Percentage Change of Moving to RP- 2014 (with MP-2014) from:			
Base Rates		UP-94	RP-2000	RP-2000	RP-2000	RP-2014	UP-94	RP-2000	RP-2000	RP-2000
Proj. Scale		AA	AA	BB	MP-2014	MP-2014	AA	AA	BB	MP-2014
	Age									
Males	25	3.4455	3.4586	3.5323	3.5823	3.5997	4.5%	4.1%	1.9%	0.5%
	35	5.0036	5.0151	5.1150	5.2004	5.2271	4.5%	4.2%	2.2%	0.5%
	45	7.2642	7.2908	7.4326	7.5687	7.5946	4.5%	4.2%	2.2%	0.3%
	55	10.6314	10.6670	10.8975	11.1216	11.1352	4.7%	4.4%	2.2%	0.1%
	65	13.0681	13.0186	13.3903	13.7992	13.7797	5.4%	5.8%	2.9%	-0.1%
	75	9.0982	8.8553	9.3028	9.7851	9.9409	9.3%	12.3%	6.9%	1.6%
	85	5.3857	5.0175	5.4051	5.7527	5.9641	10.7%	18.9%	10.3%	3.7%
Females	25	3.5645	3.4850	3.7340	3.8251	3.8419	7.8%	10.2%	2.9%	0.4%
	35	5.2236	5.0970	5.4250	5.5627	5.5909	7.0%	9.7%	3.1%	0.5%
	45	7.6719	7.4766	7.9013	8.1052	8.1425	6.1%	8.9%	3.1%	0.5%
	55	11.3406	11.0614	11.5990	11.9265	11.9323	5.2%	7.9%	2.9%	0.0%
	65	14.1065	13.7355	14.3017	14.7677	14.6860	4.1%	6.9%	2.7%	-0.6%
	75	10.2822	9.9286	10.4265	10.8908	10.8611	5.6%	9.4%	4.2%	-0.3%
	85	6.2560	6.1003	6.5286	6.9484	6.7929	8.6%	11.4%	4.0%	-2.2%

Table D-2